



# RNAscope<sup>®</sup> EZ-Batch<sup>™</sup> Slide Processing System

Document Number 321256

For Molecular Biology Applications (MBA), not intended for diagnosis. Refer to appropriate regulations.

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**Citing EZ-Batch<sup>™</sup> in Publications**

When describing a procedure for publication using this product, please refer to it as the EZ-Batch Slide Processing System.

**Disclaimers**

Advanced Cell Diagnostics, Inc. reserves the right to change its products and services at any time to incorporate technological developments. This manual is subject to change without notice.

Although this manual has been prepared with every precaution to ensure accuracy, Advanced Cell Diagnostics, Inc. assumes no liability for any errors, omissions, or for any damages resulting from the use of this information.

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## 1

# Chapter 1. Product Information



Before using this product, read and understand the information in **Appendix A. Safety** on page 11 in this document.

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**IMPORTANT!** We recommend reading the entire user manual before beginning any protocols.

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## About this guide

This user manual describes how to use the RNAscope® EZ-Batch™ Slide System.

## Product description

### Background

Many staining assays that detect molecular markers in microscope-mounted biological specimens involve repeated operational cycles. Repeated operations include incubation, where slides are held in a horizontal position that allow a small volume of reagents to incubate with the specimen; and washing, where slides are submerged and agitated in bulk reagents. These two processes often require separate slide handling devices. When many slides are processed in a batch, transferring slides repeatedly between two different devices becomes tedious, labor intensive, and error prone.

### Intended Use

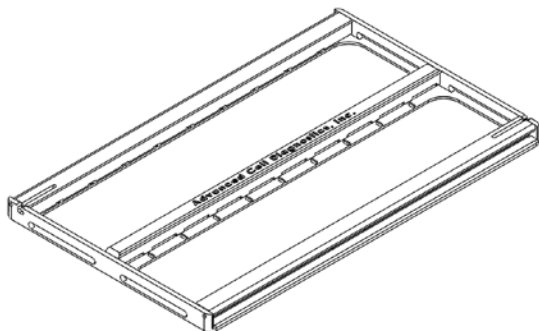
The EZ-Batch™ Slide Processing System is designed to manually batch process up to 20 slides efficiently without the need to change slide holding devices during staining assays. The system is designed for performing Advanced Cell Diagnostic's proprietary RNAscope® assays but is also compatible with most slide based FISH, ISH, and IHC assays.

## Components

The RNAscope® EZ-Batch™ Slide Processing System (Cat. No. 310007) contains the following components.

### RNAscope® EZ-Batch™ Slide Holder

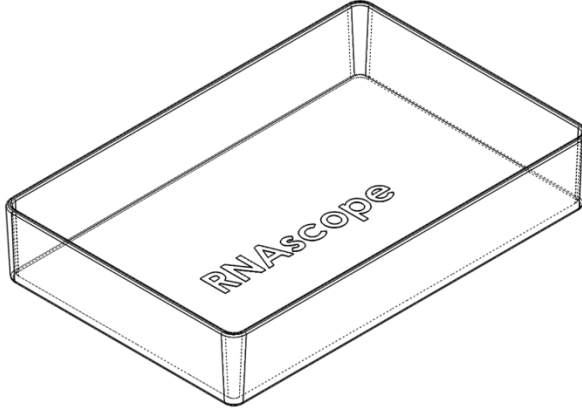
The following is a diagram of the RNAscope® EZ-Batch™ Slide Holder (Cat. No. 310017):



**Note:** The RNAscope® EZ-Batch™ Slide Holder is fully compatible with the HybEZ™ Humidity Control Tray (Cat. No. 310012) in the HybEZ™ Hybridization System (Cat. No. 310010 or 310013).

## EZ-Batch™ Wash Tray

The following is a diagram of the RNAscope® EZ-Batch™ Wash Tray (Cat. No. 310019):



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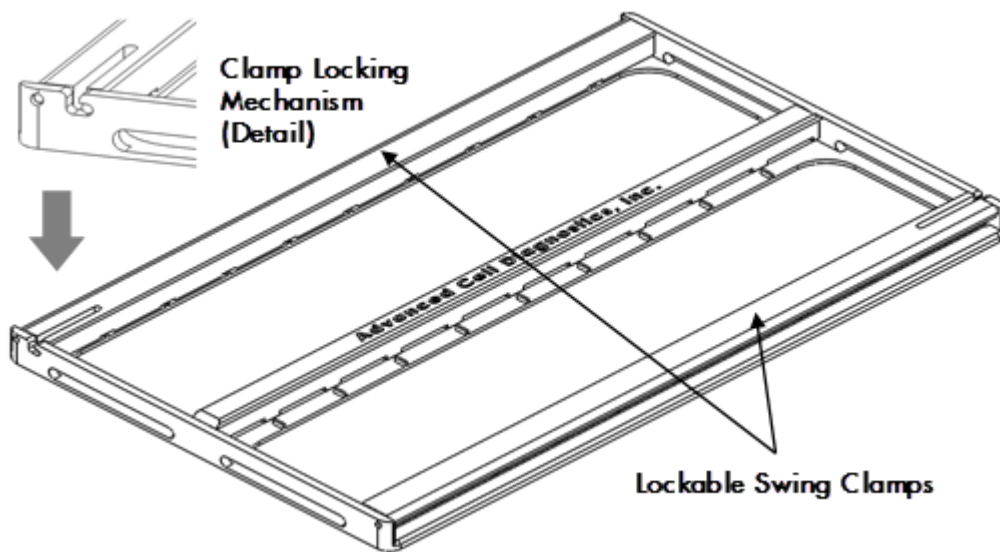
**IMPORTANT!** The RNAscope® EZ-Batch™ Slide System is not compatible with Xylene and Acetone. Do NOT submerge the Slide Holder or Wash Tray in reagents containing these materials.

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## Chapter 2. Operation

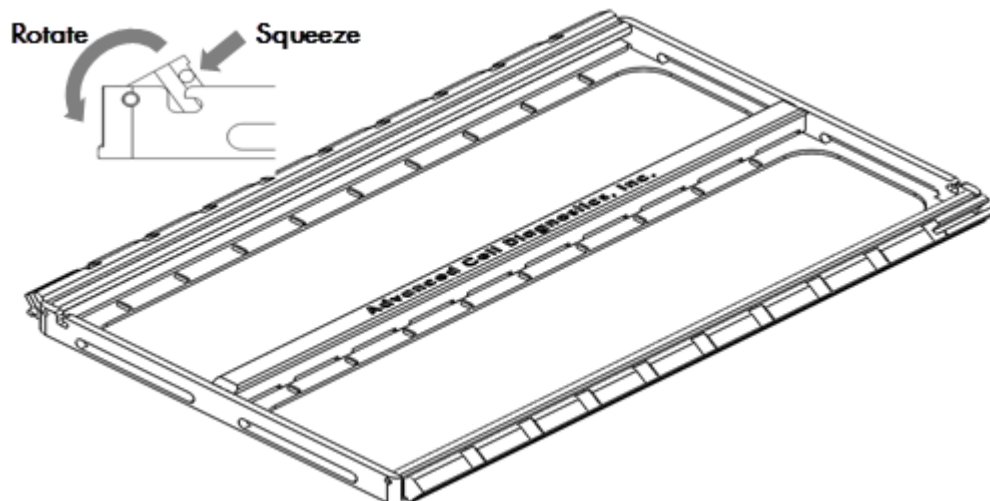
### RNAscope® EZ-Batch™ Slide Holder

The RNAscope® EZ-Batch™ Slide Holder can hold up to 20 standard microscope slides in secure, lock-down positions arranged in two parallel rows. Lock-down is achieved by two lockable swing clamps, one per row, along both sides of the slide holder. Clamp locking mechanisms are located at the slots found at one end of each clamp.

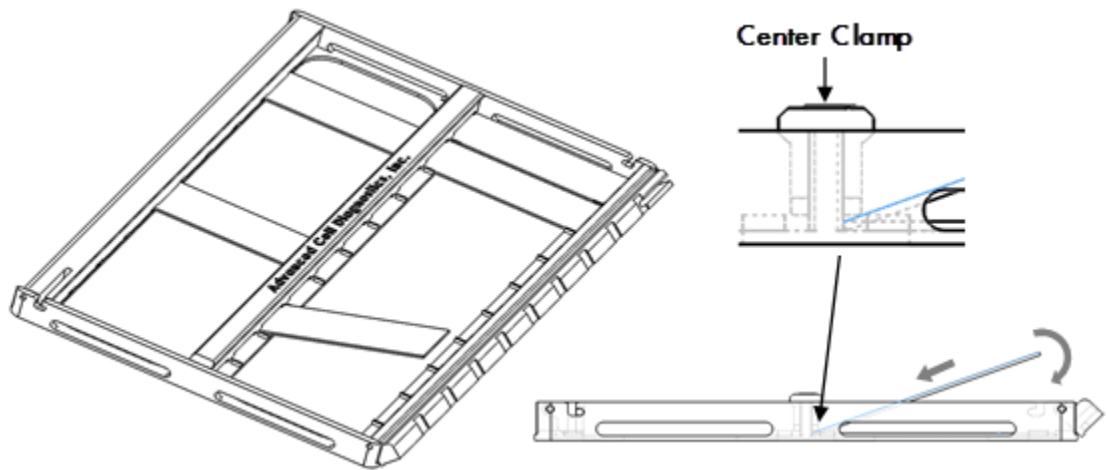


### Load slides into the RNAscope® EZ-Batch™ Slide Holder

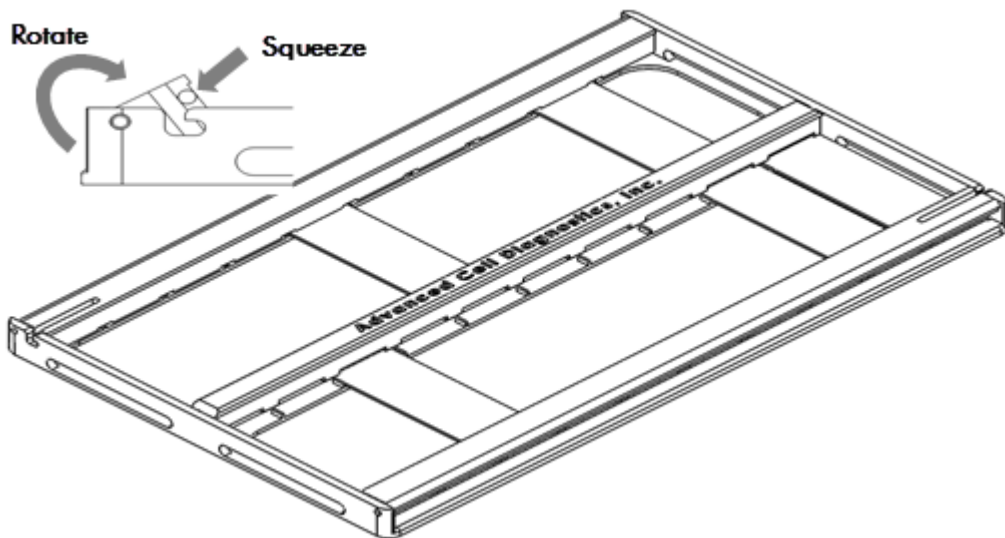
1. Open swing clamps one at a time by simultaneously squeezing the slotted portion of each clamp and rotating it as shown below.



2. Insert slides one at a time into the holder. The non-label end of each slide should be aligned toward the center of the holder and inserted under the fixed clamp (see below). Rotate the rest of the slide down into the holder.



3. Load 10 slides into a row of the holder. Close and lock the swing clamp of the row by simultaneously squeezing the slotted portion of each clamp and rotating it in the direction opposite to the direction used to open the clamp.



4. Repeat step 3 with the other holder row.

## Apply reagents to the slides

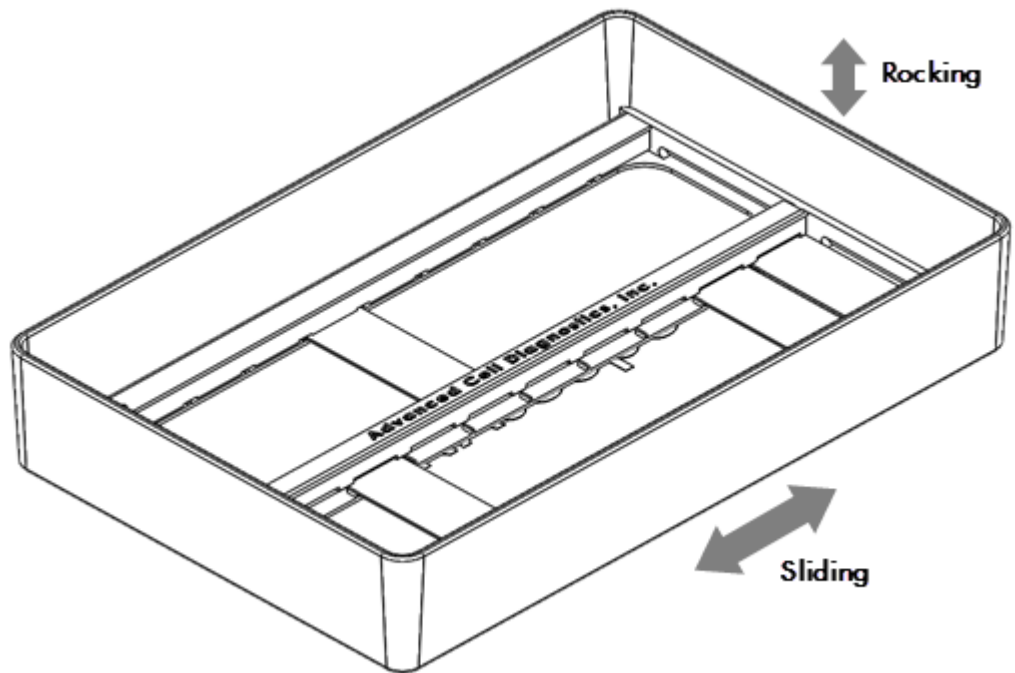
Once all slides are locked into the holder, handle them as an integrated unit. Apply reagents to each slide and place the holder on the bench or into the HybEZ™ Humidity Control Tray for incubation steps. Refer to the *HybEZ™ Hybridization System User Manual* available at: [www.acdbio.com/support/technical-doc](http://www.acdbio.com/support/technical-doc) and view the training video at [www.acdbio.com/support/online-training-videos/](http://www.acdbio.com/support/online-training-videos/) for instructions on how to use the HybEZ™ Hybridization System.

**Note:** To prevent samples from drying out when applying reagents, quickly add one drop of reagent to each sample. Then add enough reagent volume to completely cover the samples.



## Wash slides

1. Pour 300 mL 1X Wash Buffer into the RNAscope® EZ-Batch™ Wash Tray.
2. Place the RNAscope® EZ-Batch™ Slide Holder into the Wash Tray. Make sure all slides are submerged in solution.
3. Incubate the slides for for **2 MIN** at **RT**. Agitate slides by sliding or rocking the Wash Tray gently.



4. Decant the 1X Wash Buffer, refill with 300ml fresh 1X Wash Buffer and repeat the proceeding step.
5. Take the RNAscope® EZ-Batch™ Slide Holder out of the Wash Tray and shake it or tap the Holder on a tissue to remove the residual Wash Buffer.

**Note:** Minimize residual Wash Buffer on the slides but do not shake the slides out of their locked positions.



## A

## Appendix A. Safety

## Chemical safety



**WARNING!** GENERAL CHEMICAL HANDLING. To minimize hazards, ensure laboratory personnel read and practice the general safety guidelines for chemical usage, storage, and waste provided below, and consult the relevant SDS for specific precautions and instructions:

- Read and understand the Material Safety Data Sheets (MSDSs) provided by the chemical manufacturer before you store, handle, or work with any chemicals or hazardous materials. To obtain MSDSs, see **Documentation and support** in this document.
- Minimize contact with chemicals. Wear appropriate personal protective equipment when handling chemicals (for example, safety glasses, gloves, or protective clothing).
- Minimize the inhalation of chemicals. Do not leave chemical containers open. Use only with adequate ventilation (for example, fume hood).
- Characterize (by analysis if necessary) the waste generated by the particular applications, reagents, and substrates used in your laboratory.
- Ensure that the waste is stored, transferred, transported, and disposed of according to all local, state/provincial, and/or national regulations.
- **IMPORTANT!** Radioactive or biohazardous materials may require special handling, and disposal limitations may apply.

## Biological hazard safety



**WARNING!** BIOHAZARD. Biological samples such as tissues, body fluids, infectious agents, and blood of humans and other animals have the potential to transmit infectious diseases. Follow all applicable local, state/provincial, and/or national regulations. Wear appropriate protective equipment, which includes but is not limited to: protective eyewear, face shield, clothing/lab coat, and gloves. All work should be conducted in properly equipped facilities using the appropriate safety equipment (for example, physical containment devices). Individuals should be trained according to applicable regulatory and company/institution requirements before working with potentially infectious materials. Read and follow the applicable guidelines and/or regulatory requirements in the following:

**In the U.S.:**

- U.S. Department of Health and Human Services guidelines published in Biosafety in Microbiological and Biomedical Laboratories found at: [www.cdc.gov/biosafety](http://www.cdc.gov/biosafety)
- Occupational Safety and Health Standards, Bloodborne Pathogens (29 CFR§ 1910.1030), found at: [www.access.gpo.gov/nara/cfr/waisidx\\_01/%2029cfr1910a\\_01.html](http://www.access.gpo.gov/nara/cfr/waisidx_01/%2029cfr1910a_01.html)



- Your company's/institution's Biosafety Program protocols for working with/handling potentially infectious materials.
- Additional information about biohazard guidelines is available at: [www.cdc.gov](http://www.cdc.gov)

#### **In the EU:**

- Check local guidelines and legislation on biohazard and biosafety precaution and refer to the best practices published in the World Health Organization (WHO) Laboratory Biosafety Manual, third edition, found at:  
[www.who.int/csr/resources/publications/biosafety/who\\_cds\\_csr\\_lyo\\_2004\\_11/en/](http://www.who.int/csr/resources/publications/biosafety/who_cds_csr_lyo_2004_11/en/)
- Information about the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) can be found at:  
[eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:133:0001:0043:EN:PDF](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:133:0001:0043:EN:PDF)



# Documentation and support

## Obtaining support

For the latest services and support information, go to: [www.acdbio.com/product\\_support.html](http://www.acdbio.com/product_support.html)

At the website, you can:

- Access telephone and fax numbers to contact Technical Support and Sales facilities.
- Search through frequently asked questions (FAQs).
- Submit a question directly to Technical Support.
- Search for user documents, MSDSs, application notes, citations, training videos, and other product support documents.
- Find out information about customer training events.

## Contact information

Advanced Cell Diagnostics, Inc.

3960 Point Eden Way  
Hayward, CA 94545

Toll Free: 1-877-576-3636

Direct: 1-510-576-8800

Fax: 1-510-576-8801

Information: [info@acdbio.com](mailto:info@acdbio.com)

Orders: [orders@acdbio.com](mailto:orders@acdbio.com)

Support Email: [support@acdbio.com](mailto:support@acdbio.com)

## Limited product warranty

Advanced Cell Diagnostics, Inc. and/or its affiliate(s) warrant their products as set forth in the ADC General Terms and Conditions of Sale found on the ADC website at [www.acdbio.com/product\\_support.html](http://www.acdbio.com/product_support.html). If you have any questions, please contact Advanced Cell Diagnostics at [www.acdbio.com/product\\_support.html](http://www.acdbio.com/product_support.html).

**Headquarters**

3960 Point Eden Way | Hayward, CA 94545 | Phone 1-510-576-8800 | Toll Free 1-877-576-3636

**For support, email [support@acdbio.com](mailto:support@acdbio.com).**

**[www.acdbio.com](http://www.acdbio.com)**

